CANCER CELL VACCINE

Abstract of the Disclosure.

Disclosed is a specific regulator of Ii protein expression or immunoregulatory function. Specifically disclosed are several forms of the specific regulator of Ii, including those which function through the formation of a duplex molecule with an RNA molecule encoding mammalian Ii protein to inhibit Ii protein synthesis at the translation level. This class includes copolymers comprised of nucleotide bases which hybridize specifically to the RNA molecule encoding mammalian Ii protein, and also expressible reverse gene constructs. In other aspects, the disclosure relates to MHC class II-positive antigen presenting cells containing a specific regulator of Ii expression. Such cells are useful, for example, in the display of autodeterminant peptides in association with MHC class II proteins. Compositions of the invention find application in methods for treating diseases, for example malignancies and autoimmune disorders, in a patient by enhancing immunological attack on undesired cells. An additional application is the isolation of autodeterminant peptides from a cell.